

ABSTRACT OF THE DISCLOSURE

A computer-implement method and system are provided for processing traffic flow statistics relating to data transmissions between computers connected to a computer network. Traffic flow statistics gathered from network devices are processed in a series of enhancing steps to produce records for each unique combination of source IP address and destination IP address. The records contain corresponding details for each transmission including amount of data transmitted, transmission start and end times, and identification of the ISPs serving the source and destination computers. The records may be further enhanced to include categorization of each transmission according to the business relationship between the ISPs serving the source and destination computers. The records may be used as desired, such as for network accounting purposes or for generating bills to customers of an ISP, according to billing rates the ISP may assign in relation to the various parameters contained in the records.